

# ABSTRACT OF THE DISCLOSURE

In an apparatus for suppressing noise in an input image signal representing a radiographic image: at least one first characteristic of the input image signal is obtained by calculation based on information indicating an exposure dose with which the radiographic image has been produced; at least one second characteristic of a smoothing filter is adapted to the input image signal based on the at least one first characteristic; and the input image signal is processed by using the smoothing filter so as to smooth the radiographic image. In addition, a plurality of band-limited image signals respectively representing a plurality of band-limited images belonging to a plurality of different frequency bands are generated based on the input image signal, each of the plurality of band-limited image signals is processed by using the smoothing filter so as to smooth each of the plurality of band-limited images.